

The characters assigned to cancer by pathology and pathological anatomy are insufficient, in many cases, to render the diagnosis certain. Lancinating pains, a mammillated aspect, hardness, electricity, softening, ulceration, affection of the contiguous tissues, general affection of the constitution, the results of anatomical examination, relapse after removal, are circumstances common to many tumours—epithelial, fibrinous, fatty, cystoid, and others less known.

The combined pathological and microscopical characters of tumours, supposed to be cancerous, leads M. Sedillot to range them in five classes:—

a. Tumours presenting all the pathological and microscopical characters of cancer.

b. Tumours presenting all the pathological characters of cancer, but evidently belonging to other genera, as proved by microscopical examination.

c. Tumours which do not present decided characters of cancer, though the microscope shows them to be cancerous.

d. Tumours whose pathological characters are those of cancer, and which are believed to be cancer, and respecting which the microscope neither confirms nor invalidates the opinion.

e. Tumours whose nature remains quite uncertain despite our pathological and microscopical knowledge.

In a microscopical point of view, cancer consists of a new element without any analogue in the economy, which possesses an independent life, and also distinct forms, whereby, in most cases, a certain diagnosis can be deduced. The dimensions of the cancerous cell may attain ten times the diameter of the globules of the blood. The cancerous cell originates in two distinct ways, sometimes it commences in an amorphous liquid (blastema) under the form of nuclei (cytoblasts), which become changed into nucleoli (small cells) and subsequently attain their complete development; sometimes it commences and undergoes the phases of its increase in a pre-existing cell (endogenous generation), in which are seen nuclei and nucleoli, which escape by dehiscence or by a breaking up from the mother cell when they come to maturity. The other elements, which are tolerably often found associated with cancer, are—cellular and fibrous tissue, fat, granular globules, melanosis, blood, pus, crystals of cholesterine, &c. Fusiform bodies or cells in course of fibrillous transformation are very common.

The appearance of cancer indicates an original (hereditary) or acquired constitutional predisposition, the existence of which may be suspected, but can never be demonstrated except by the appearance of the disease. Local irritations, causing permanent sanguineous congestions, injuries with fibrinous deposits, any morbid action developed in a particular point of the economy, may excite cancer in a predisposed individual. The cancerous diathesis or cachexia seems in some rare cases to invade the economy very rapidly, and to precede or at least accompany the local manifestation of one or of several cancers.

The treatment is palliative, curative, or preventive, according to the indications; palliative, if the cachexia is manifest, the cancer intense, multiple, or inaccessible; curative, in every case where the constitution is still sound, the cancer circumscribed, and susceptible of being completely removed. The prophylactic treatment consists in preventing and combating all the causes of the evolution of cancer in persons already operated on for cancer, and therefore liable to relapse.—*Dublin Med. Press*, Oct. 21, 1846.

33. *Case in which there was a black secretion from the skin of the forehead and upper part of the face.*—The tenth volume of the *Medico-Chirurgical Transactions*, (London, 1845,) contains an account by WM. TEEVAN, Esq., of a very remarkable case of a lady, 15 years of age, who was afflicted with a singular discoloration of the forehead and upper part of the face. The discoloration was first observed about the middle of January, 1845, on the left under eyelid, near the internal angle of the eye; appearing at the commencement as a brownish spot, which in the course of four or five days assumed a jet black colour, and gradually extended to the entire forehead and eyelids of both eyes. The discoloration never appeared on any other part of the body, and on the forehead was accurately limited by the hair. The patient stated that on her attempting to wash the black matter off it caused her so much pain, owing to the sensitiveness of the skin, that she desisted,

and until Mr. Teevan removed it by the application of soap and water, she was not aware that it could be removed by ordinary means. The quantity of matter removed from the skin was sufficient to darken four basins of water as black as Indian ink. With the exception of occasional headache and severe pain in the chest, the patient appears in good health; the bowels are generally confined; the catamenia regular but scanty; her complexion is fair and the hair light brown.

Mr. T. was naturally enough inclined to suspect some imposition on the part of the lady, and after washing the black matter he kept a watch on her, never allowing her to leave him for five or six hours, when he observed the black secretion to reappear.

About three months after this patient came under Mr. T.'s care, she was attacked with erysipelas of the face and neck, during which attack she vomited two large basinful of fluid, containing an immense quantity of black matter, which subsided to the bottom of the vessel. This black matter, when examined under the microscope, as well as by analysis, was found by Dr. Rees to be identical with the specimens of black matter with which Mr. T. supplied him from the patient's face; the vomited matter, and a specimen taken from the patient's face, were both examined under the microscope, by Dr. Hodgkin and Mr. T., and found to be analogous. Both appeared and smelt exactly like soot. The vomiting lasted for two days, during which period the black was passed by the bowels, as well as by urine, the face remaining free from any discoloration during this time. On the evening of the third day, no matter having been ejected from the stomach or secreted from the face since the morning, she was seized with the most agonizing pain in her stomach and bowels, which subsided after the administration, in divided doses, of 150 drops of laudanum. The morning after the attack of pain, the black secretion reappeared, as usual, on the forehead and face, and continued for two weeks, when it ceased (May 23d), having for two or three days previous to its entire cessation, appeared in less quantity than usual. There is no case on record, Mr. T. remarks, "similar to the present one; and respecting the physiological cause of the disease, I have no clear conception; but I believe the secretion to be analogous to what occurs in melanosis. The cessation of the secretion of the black matter by the cutaneous exhalents of the forehead during the period it was ejected from the stomach, bowels and kidneys, although singular, is not unaccountable; the latter organs probably becoming a substitute for the former. The patient had no tendency whatever to hysteria. The secretion was always more abundant during the night than the day, so much so, that when the patient washed her face at bed-time, the affected parts were invariably covered the subsequent morning with a large quantity of the black matter in a solid but moist condition."

The following is the analysis of the black matter by Dr. G. O. Rees:—

"We may regard the black matter, scraped from the face, as composed of carbon, iron (in some unknown form of combination), lime, animal matter (albuminous), fatty matter, alkaline phosphate and chloride.

"Its reactions were as follows:—

"It was insoluble in water; it yielded fatty matter to alcohol; the black colour was not changed by the action either of caustic potassa or strong nitric acid; on burning it, a strong odour of decomposing animal matter was perceived. When moistened with distilled water it reddened litmus paper. The ashes obtained by its combustion were very alkaline.

"Under the microscope was seen a confused mass apparently made up of short hairs, epithelial scales, granules and globules of fat.

"I must remark, that the ashes obtained from the second specimen you sent me, as scraped from the face, were not so alkaline as those from the first specimen; nor did the black matter show an acid reaction. This may have been produced, however, as a difference consequent on less of the ordinary cutaneous secretion having become mixed with the carbon. The black matter vomited by the patient, when viewed under the microscope, had much the appearance of broken down animal structure. It was very acid, but contained scarcely any hydrochloric acid. It burned away easily, leaving an ash possessing an alkaline reaction. The carbon from the face was so finely divided that it burned with a vivid combustion, almost having the appearance of deflagration. Carbon is

certainly the colouring principle of this black material, which, in other respects (that is, with the exception of this uncombined element being present), gives all the reactions of a common form of animal matter."

We learn from a postscript to the paper, dated September 29th, four months after the cessation of the secretion, that the patient remained free from any return of the secretion, and was in every respect quite well.

34. *Chlorate of Potash as a remedy for Mercurial Salivation.*—Mr J. ALLISON, in a paper in the *London Medical Gazette*, extols the efficacy of the chlorate of potash as a remedy in mercurial salivation. Mr. A. cautions the practitioner, however, to watch its effects, for if its exhibition be not discontinued, he says, at the proper time, a state of the system may be induced characterized by the phenomena of true inflammation.

35. *Treatment of Epilepsy.*—Dr. BRANSON communicated to the Sheffield Medical Society, Oct. 29th, 1846, "A numerical Analysis of the Treatment of Forty-two Cases of Epilepsy."

After alluding to the importance of the numerical method of investigating disease, introduced by Louis, he stated that the forty-two cases occurred in 3413 registered cases, being in the proportion of one in eighty-one. Eighteen occurred in males—twenty-four in females, which corresponds with the observations of the French pathologists; but is contrary to the opinion of Drs. Watson and Elliotson, who regard the male sex as more liable to epilepsy than the female:—Under the age of 7 there were 4 males, 2 females; from 7 to 14, 6 males, 2 females; from 14 to 21, 2 males, 6 females; from 21 to 31, 4 males, 10 females; from 31 to 41, 2 males, 2 females; from 41 to 51, 0 males, 2 females.

From this it appears that under puberty the male, afterwards the female sex, is most liable. The predisposition which seems to exist in the female sex between the ages of fourteen and thirty-one may be regarded merely as an indication of the hysterical temperament, the extremes of hysteria and epilepsy being separated by a very narrow-line. Of these cases, twenty were centric, and twenty-two eccentric.

Of the eccentric;—6 were connected with amenorrhœa; 7 with intestinal irritation and worms; 2 with undue lactation; 2 with dentition; 1 with menorrhagia; 2 with cessation of the catamenia; 2 with accident—one from a blow on the head inflicted by a schoolmaster, by which the boy was rendered insensible for some weeks, and the other from the breaking of a grinding stone.

One of the cases classed under the head of worms might be called centric, for though the patient parted with a lumbricus teres, the origin of the fit could clearly be traced to fright, from the relation of ghost stories.

Of the eccentric cases:—5 were treated with nitrate of silver; 6 with preparations of steel; 11 with active purgatives, blisters, leeches, turpentine, assafœtida, and vegetable tonics. Of the centric cases:—13 were treated with nitrate of silver; 7 without nitrate of silver; with purgatives, blisters, setons, steel, and valerian.

Of the five eccentric cases treated by nitrate of silver, there were:—cured 1, relieved 1, much relieved 2, not relieved 1.

Of the six treated with steel, there were:—cured 1, relieved 1, much relieved 0, not relieved 4.

Of the eleven treated otherwise, there were:—cured 4, relieved 1, much relieved 0, not relieved 6.

Of the thirteen centric cases treated by nitrate of silver, there were:—cured 0, relieved 4, much relieved 2, not relieved 7.

Of the seven treated by other remedies, there were:—cured 0, relieved 0, much relieved 1, not relieved 6.

The duration of treatment varied from three weeks to seventeen months; the average being about three months. Thus of the eighteen cases of both kinds treated by nitrate of silver, ten derived benefit; whilst of the remaining twenty-four, eight only received benefit, the result being clearly in favour of nitrate of silver as a remedy in epilepsy.

The great objection to the use of this remedy is its well known property of permanently staining the skin, by a continuance of its use—a property which has